

XVII. *Description of the female of Chastopsylla godfreyi Waterst., with further notes on the Genus.* By
JAMES WATERSTON, B.D., B.Sc.

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SINCE my original notice of the male of this species appeared (Proc. Roy. Phys. Soc. Edin., Vol. XIX, No. 1, pp. 8-11, fig. 1, 15:iii:1913) no further records of its occurrence appear to have been made, and the female is still undescribed. Among some parasites of small mammals from Grahamstown submitted to me in the beginning of 1915 and subsequently put aside, there are two females of this genus which, from their association with the known male of *C. godfreyi* and from their general characters, are probably referable to this species. As Mr. Rothschild, to whom I am indebted for examining some preparations, agrees in this opinion I have drawn up the following notes.

***Chastopsylla godfreyi* Waterst.**

♀. Head evenly rounded. Frontal notch obsolete, one moderate bristle at the edge of the eye anteriorly, two long and stout above the genal edge with a third finer and shorter above the more anterior of the two. Five to six short fine hairs along the upper edge of the antennal groove with three stouter bristles in a line above. Transverse row of seven to eight fine bristles before the posterior edge. Max. palpus 6, 6, 5, 7. Thorax similar to *C. rossi* Waterst. Mesonotum, median row of bristles 9-10. Metanotum, antemedian row of seven to eight bristles. Epimeron with five bristles (2, 3). The posterior edges of the metanotum and of the abdominal tergites are thin and nowhere develop the darkened triangular chitinous teeth found in *C. rossi* Waterst., and *C. numae* Rothschild.

The chaetotaxy of the abdominal sclerites is as follows:—

Tergites . . .	I.	II.	III.	IV.	V.	VI.	VII.
Ante median . .	6	4	6	4	3	3	4
Post median . .	8	13	14	13	12	12	10
Sternites . . .	—	2	8	8	7	6	10

The antepygidial bristle is as long as the second joint of the hind tarsus. Stylet slender (4 : 1), but much shorter (2 : 5) than the elongate apical bristle. Modified segments (see fig. 1). Receptaculum seminis (fig. 1a) with the head shorter than the distinctly slender tail.

Legs :—On the dorsal edge of the hind tibia between the 4th and 5th pairs of spines is a wide spineless gap. The proportions of the tarsal joints are much as in *C. rossi* Waterst., but in the mid leg (where the first three segments are in the ratio 25, 27½, 20) the second and third are longer, while in the hind leg (where the first two

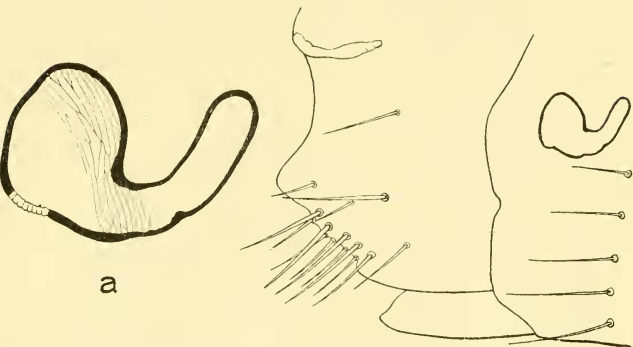


FIG. 1.—*Chiastopsysylla godfreyi* Waterst, ♀. 8th segment and 7th sternite. a, receptaculum seminis.

segments are in ratio 50, 33) the second segment is a trifle shorter than in *C. rossi*.

Length, a little over 2 mm.

KEY TO THE SPECIES OF *CHIASTOPSYLLA* ROTHSC.

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|---|----|
| 1. Males. | 2. |
| — Females. | 4. |
| 2. Frons evenly rounded. "Finger," broadest below the middle, short, not exceeding in length the greatest breadth of the 9th sternite whose fringing bristles are all simple . . . <i>godfreyi</i> Waterst, | |
| — Frons with distinct angle near the base of the maxillary palpus. "Finger" | |

- slender, broadest near base, greatly exceeding the breadth of the 9th sternite, which bears three pairs of scales distally. 3.
3. Eighth sternite finger like distally, the three scales on the 9th diamond-shaped equal, acutely pointed . . . *numae* Rothsch.
- Eighth sternite wedge-shaped, the scales dissimilar. The uppermost broad, subquadrate, the second deeply and roundly emarginate distally, the third longest pointed spatulate . . . *rossi* Waterst.
4. Posterior edge of 7th sternite incised about the middle. 5.
- Posterior edge of 7th sternite entire or produced medianly. 6.
5. Eighth tergite with about a dozen stiff bristles on its ventral half, not counting those which stand along the margin posteriorly. Incision of the 7th tergite moderately deep. Metanotum and some of the tergites armed with teeth on hind margin . . . *numae* Rothsch.
- Eighth tergite nearly bare ventrally, incision shallow, marginal teeth absent . . . *godfreyi* Waterst.
6. Seventh sternite with edge posteriorly entire, four to five external bristles on hind tibia . . . *octavii* Rothsch.
- Seventh sternite with short but distinct rounded median lobe, eight external bristles on hind tibia . . . *rossi* Waterst.

In the above key by "tergite" and "sternite" reference is made strictly speaking only to *half* of the sclerites respectively indicated, *i. e.* to the profile view afforded in a whole mount. *Chiastopsylla* Rothsch., so far as our knowledge goes at present, is an exclusively S. African (Cape Colony) genus associated with small ground mammals of the genera *Mus*, *Mystromys*, *Otomys*, *Crocidura*, *Grapho-ularis* and *Arvicanthis*.